

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) An isolated nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of:

a) SEQ ID NO. 2, SEQ ID NO. 4, SEQ ID NO. 6, SEQ ID NO. 8, or SEQ ID NO.

10;

b) ~~a nucleic acid sequence encoding amino acid SEQ ID NO.3, SEQ ID NO.5, SEQ ID NO.7, SEQ ID NO.9 or SEQ ID NO.11;~~

[[c)] b) a complementary ~~nucleic acid sequence~~ of SEQ ID NO. 2, SEQ ID NO. 4, SEQ ID NO. 6, SEQ ID NO. 8, or SEQ ID NO. 10; [[and]]

c) a nucleic acid sequence comprising at least 289 consecutive nucleotides of SEQ ID NO.2 or SEQ ID NO.4;

d) a nucleic acid sequence comprising at least [[50]] 500 consecutive nucleotides of which hybridizes under stringent conditions to ~~SEQ ID NO. 2, SEQ ID NO. 4, SEQ ID NO. 6, SEQ ID NO. 8, or SEQ ID NO. 10~~ [[.]]; and

e) a complement of (c) or (d).

2. (Original) The isolated nucleic acid of Claim 1 which is DNA.

3. (Original) The isolated nucleic acid of Claim 1 which is RNA.

4. (Original) An expression vector containing the nucleic acid of Claim 1.

5. (Original) A host cell containing the vector of Claim 4.

6. (Original) The host cell of Claim 5 which is a eukaryotic cell.

7. (Original) The host cell of Claim 6 which is a human cell.

8. (Original) The host cell of Claim 5 which is a prokaryotic cell.

9. (Currently amended) An isolated ~~Isolated~~ DNA or RNA comprising at least: 50
~~consecutive nucleotides of:~~

a) 289 consecutive nucleotides of SEQ ID NO. 2, or SEQ ID NO. 4~~[[,]]; SEQ ID~~
~~NO. 6, SEQ ID NO. 8, or SEQ ID NO. 10; or~~

b) ~~a complementary nucleic acid sequence of: SEQ ID NO. 2, SEQ ID NO. 4, 500~~
consecutive nucleotides of: SEQ ID NO. 6, SEQ ID NO. 8, or SEQ ID NO. 10~~[[,]]; or~~

c) a complement of (a) or (b).

10. (Cancelled)

11. (Original) An expression vector containing the DNA or RNA of Claim 9.

12. (Original) A host cell containing the vector of Claim 11.

13. (Currently amended) The host cell of claim ~~[[5]]~~ 12 which is a eukaryotic cell.

14. (Currently amended) The host cell of claim ~~[[6]]~~ 13 which is a human cell.

15. (Currently amended) The host cell of claim ~~[[5]]~~ 12 which is a prokaryotic cell.

16. – 20. (Cancelled)

21. (Currently amended) An isolated polynucleotide comprising the nucleotide sequence of
~~variant of SEQ ID NO. 2, or SEQ ID NO. 4, SEQ ID NO. 6, SEQ ID NO. 8, or SEQ ID NO. 10~~
wherein position 1389 has a cytosine to thymine substitution. wherein the variation contains one
~~or more SNPs from Table 5.~~

22. – 26. (Cancelled)

27. (Currently amended) An isolated nucleic acid fragment comprising at least ~~[[15]]~~ 289 consecutive nucleotide bases of ~~BAC RP11-0702C13~~ of the nucleotide sequence SEQ ID NO. 1.

28. – 31. (Cancelled)

32. (Currently amended) A kit ~~for detecting chromosome 12 disorder in a biological sample~~ comprising a probe containing a nucleic acid sequence of Claim 1 and hybridization reagents, wherein said kit detects chromosome 12 disorder in a biological sample.

33. (Cancelled)